



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/820,844	03/30/2001	Sadayuki Iwai	205379US0	7041

22850 7590 07/28/2004

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER

FERGUSON, LAWRENCE D

ART UNIT	PAPER NUMBER
----------	--------------

1774

DATE MAILED: 07/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/820,844

Applicant(s)

IWAI, SADAYUKI

Examiner

Lawrence D Ferguson

Art Unit

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-48 and 97-135 is/are pending in the application.
- 4a) Of the above claim(s) 1-48, 97 and 98 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 99-135 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Amendment*

1. This action is in response to the amendment mailed May 17, 2004.

Claims 49-96 were canceled and claims 99-135 were added rendering claims 1-48 and 97-135 pending with claims 1-48 and 97-98 withdrawn from consideration.

### *Claim Rejections – 35 USC § 103(a)*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 99-135 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al. (U.S. 5,978,638).

Tanaka discloses an image forming apparatus for forming a toner image by use of an intermediate transfer belt (abstract and column 3, lines 61-67) having a hardness (column 4, line 13). Tanaka discloses the image forming apparatus comprising an elastic layer of rubber (column 5, lines 1-3) and polyurethane material (column 8, line 43 and column 11, line 15). The reference discloses an elastic layer having a JIS-A hardness of 85° or less and a second layer having a thickness of 200 micrometers or less (column 8, lines 7-15) and the first layer has a thickness between 300 micrometers and 3000 micrometers (column 8, lines 19-20) where the covering layer (31) is formed

Art Unit: 1774

on the elastic layer (30) (column 8, lines 7-10) where a third layer is formed on the second layer (column 8, lines 64-66). Although Tanaka is silent of Young's module of the second belt layer, the claimed Young's module is directly related to the specific belt used. Since Tanaka uses the same second layer as Applicant, the Young's module range of the second belt would be expected to be the same as claimed.

In claims 99 and 118, the phrases "for forming a latent image" and for developing said latent image" are intended uses which are given little patentable weight in product claims. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). In claims 99 and 118, the phrase "the method by which the transfer belt is prepared comprising: feeding a first raw liquid material into a hollow, cylindrical mold, which is included in a centrifugal molding machine, with said mold being rotated; curing the first raw material to thereby form a first endless belt layer on an inside of the mold; feeding a second raw liquid material into the mold with said mold being rotated, and then curing the liquid material to thereby form a second belt layer" introduces a process limitation to the product claim. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966. Further, process limitations are given no patentable weight in product claims.

***Response to Arguments***

4. Arguments made in regards to rejection made under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al. (U.S. 5,978,638) have been considered but are unpersuasive. Applicant argues layer 101 of the present belt does not correlate directly with layer 30 and layer 102 does not correlate with layer 31 of Tanaka. Layer 101 of the claimed invention is the first layer and layer 102 is the claimed second layer. Similarly the covering layer (31) of Tanaka is formed on the elastic layer (30) (column 8, lines 7-10) rendering layer (30) the first layer, which is capable of being formed on the outside of the second belt layer as shown in Applicant's figure 5. Applicant further argues there is no discussion of the particular problem described in the present case which the image transfer belt of the invention overcomes, which is directed to intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Applicant notes an important parameter of covering layer 31 is its permittivity which is said to be less than or equal to 6, where permittivity is not claimed. Applicant claims an intermediate image transfer belt for an image forming apparatus that

Art Unit: 1774

comprises various components. Because claims 99 and 118 use comprising language, the cited claims do not exclude additional, unrecited elements. See M.P.E.P. 2111.03.

### **Conclusion**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is 571-272-1522. The examiner can normally be reached on Monday through Friday 9:00 AM – 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye, can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lawrence Ferguson  
Patent Examiner  
AU 1774



**B. HAMILTON HESS  
PRIMARY EXAMINER**